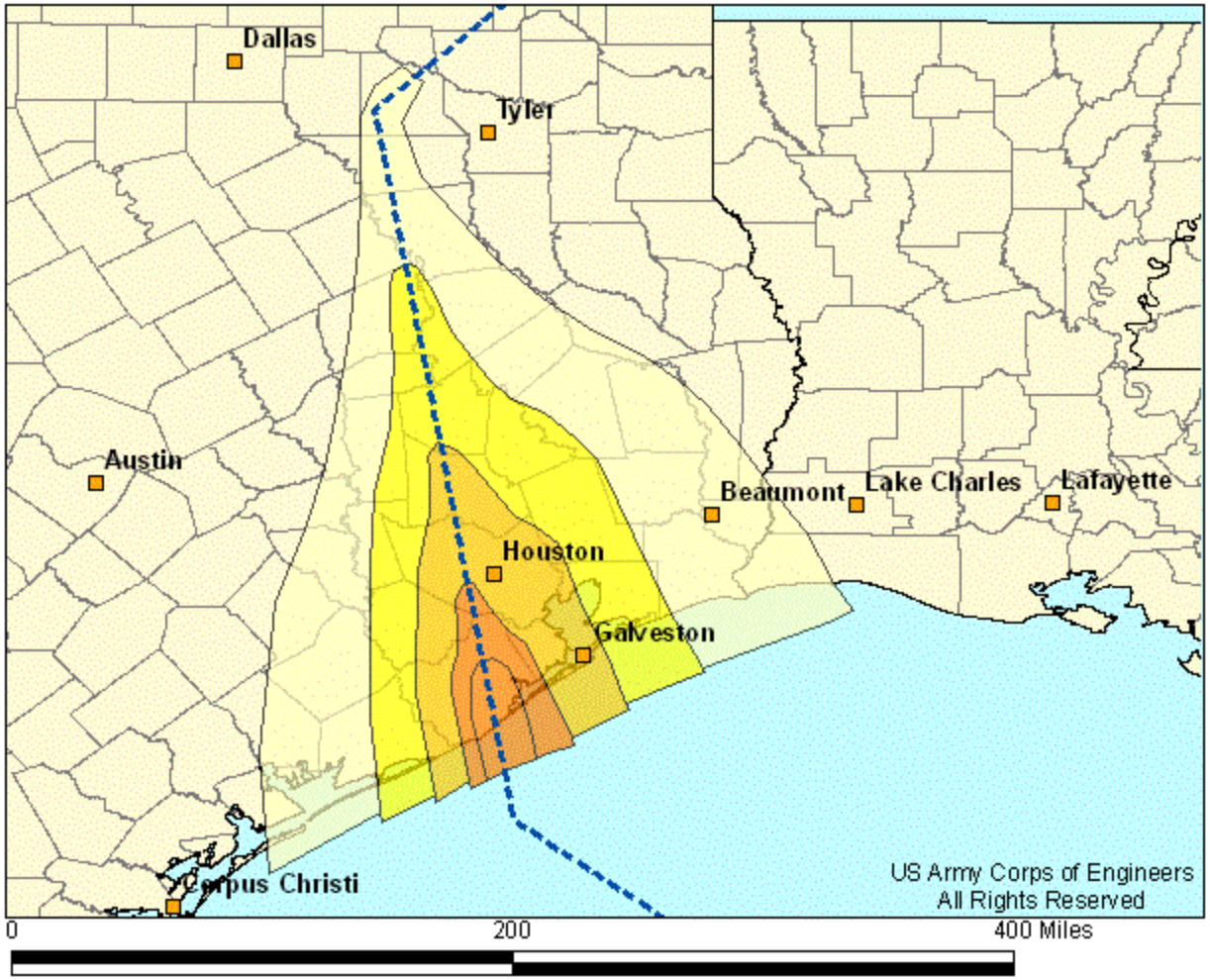
US Army Corps of Engineers

Hurricane Ike Projected Damage Areas

Landfall Expected In About 48 Hours

For Planning Purposes Only!



Post Landfall Projected Damage Areas

This model is based on a Category 3 storm making landfall near Galveston, TX.

Forecast Track
Historic Track

Projected Damage Areas

- CAT 0-type damage
- CAT 1-type damage
- CAT 2-type damage
- CAT 3-type damage
- CAT 4-type damage
- CAT 5-type damage

Information provided on this page displays a Category 3 storm making landfall near Galveston, TX. These projections are based on information from the NHC (0500 EDT 09/11/2008) forecast.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

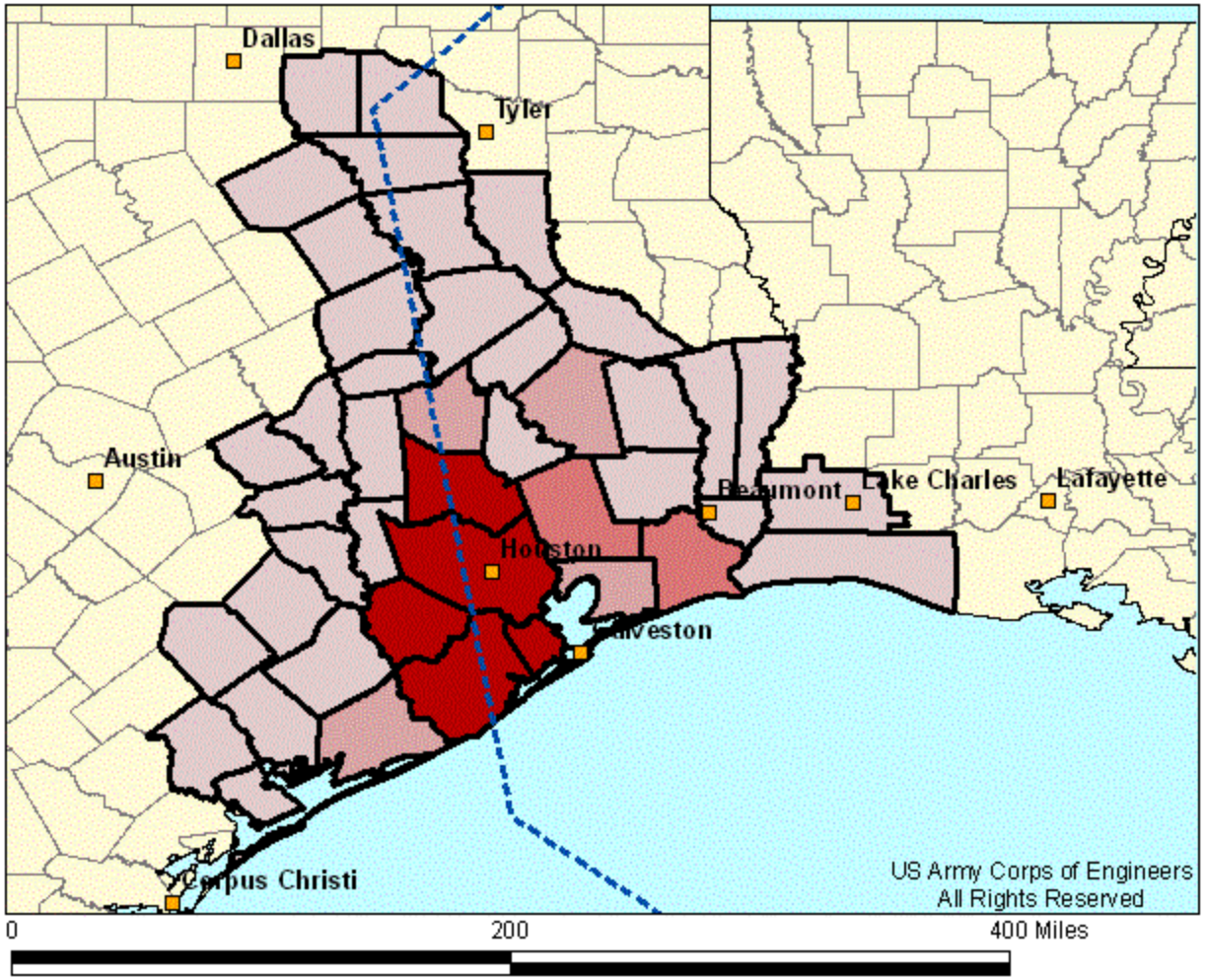
Hurricane Ike Projected Damage Areas	
Generated By: Siemsen/Deatrick, LRL 0800 EDT 09/11/2008	
Sources: HURREVAC LRL-DEBRIS	Page 1 of 13

US Army Corps of Engineers

Hurricane Ike Debris Model

Landfall Expected In About **48** Hours

For Planning Purposes Only!



Post Landfall Debris Model Results

Texas - 57,420,000 Yards
Louisiana - 59,000 Yards

Model results per County on following page

This model is based on a Category 3 storm making landfall near Galveston, TX.

Forecast Track
Historic Track

Debris

- < 100,000 cubic yards
- 100,000 - 249,999 cubic yards
- 250,000 - 499,999 cubic yards
- 500,000 - 999,999 cubic yards
- >1,000,000 cubic yards

Information provided on this page displays a Category 3 storm making landfall near Galveston, TX. These projections are based on information from the NHC (0500 EDT 09/11/2008) forecast. The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds, but does not include volume that may be covered by private insurance. Debris volume may include storm surge generated debris.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Ike Debris Model

Generated By: Siemsen/Deatrick, LRL
0800 EDT 09/11/2008

Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Ike Debris Model

Landfall Expected In About **48** Hours

For Planning Purposes Only!

State	Yards per State	County	Yards per County
Louisiana		Calcasieu	34,000
		Cameron	25,000
Louisiana	59,000		
Texas		Anderson	61,000
		Angelina	14,000
		Austin	36,000
		Brazoria	5,646,000
		Brazos	12,000
		Burleson	< 1,000
		Calhoun	21,000
		Chambers	138,000
		Cherokee	< 1,000
		Colorado	23,000
		Fort Bend	3,837,000
		Freestone	9,000
		Galveston	2,639,000
		Grimes	63,000
		Hardin	80,000
		Harris	39,838,000
		Henderson	52,000
		Houston	56,000
		Jackson	19,000
		Jasper	33,000
		Jefferson	327,000
		Kaufman	< 1,000
		Lavaca	< 1,000
		Leon	44,000
		Liberty	255,000
		Madison	20,000
		Matagorda	120,000

State	Yards per State	County	Yards per County
Texas		Montgomery	3,273,000
(continued)		Navarro	< 1,000
		Newton	19,000
		Orange	98,000
		Polk	112,000
		San Jacinto	88,000
		Trinity	47,000
		Tyler	65,000
		Van Zandt	33,000
		Victoria	2,000
		Walker	177,000
		Waller	71,000
		Washington	19,000
		Wharton	73,000
Texas	57,420,000		

The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds, but does not include volume that may be covered by private insurance. Debris volume may include storm surge generated debris.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

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Hurricane Ike Debris Model

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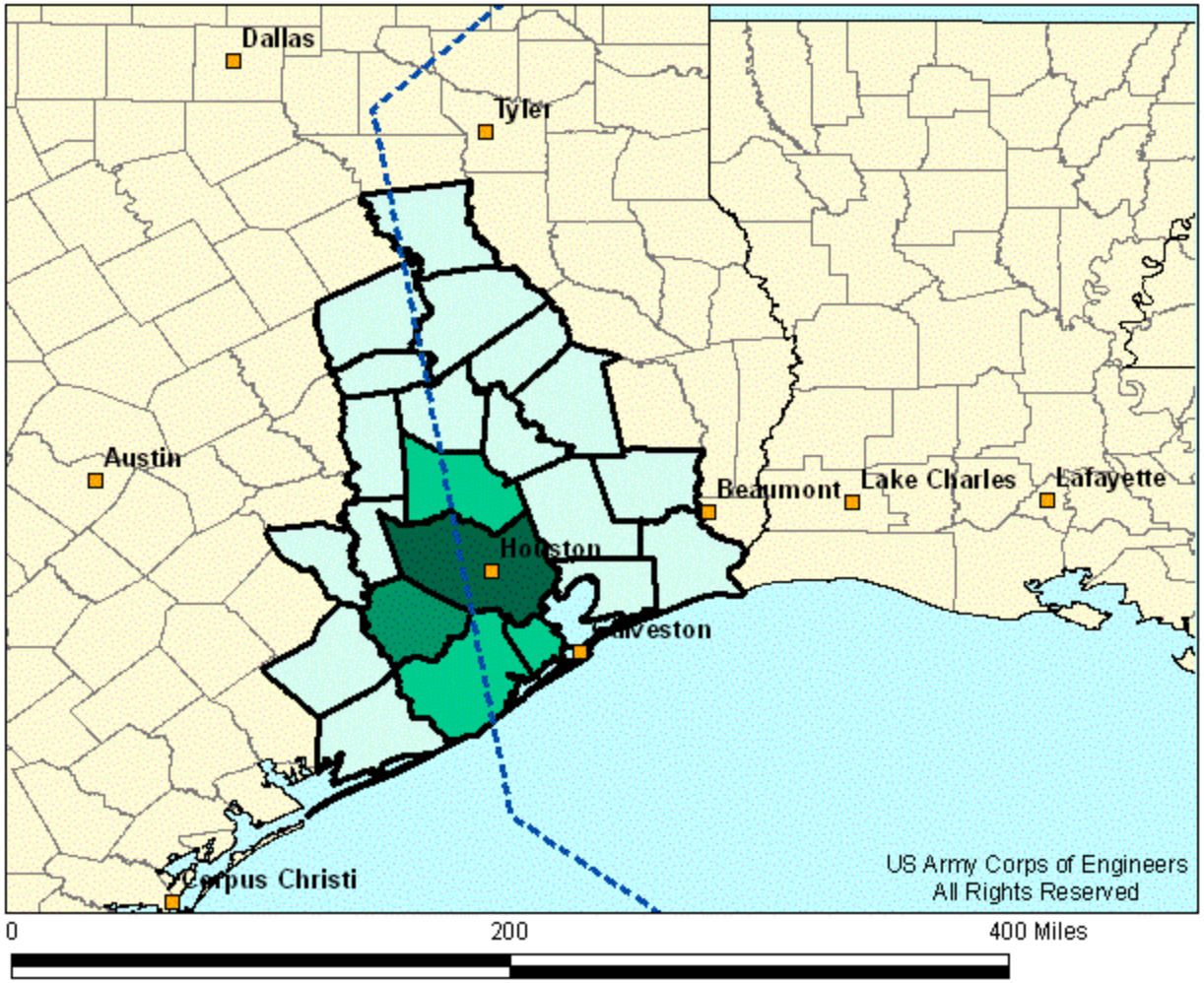
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Ike Commodities Model

Landfall Expected In About **48** Hours

For Planning Purposes Only!



Post Landfall Water Model Results

Day One / Day Two / Day Three
Texas – 64/127/254 Truckloads

Model results per County on following page

This model is based on a Category 3 storm making landfall near Galveston, TX.

Forecast Track
Historic Track

Commodities

- < 5 Trucks Each
- 5 - 10 Trucks Each
- 11 - 20 Trucks Each
- 21 - 40 Trucks Each
- > 40 Trucks Each

Information provided on this page displays a Category 3 storm making landfall near Galveston, TX. These projections are based on information from the NHC ***(0500 EDT 09/11/2008)*** forecast. The amount of commodities forecasted is based on Mission Guide Book requirements and SME input. The graphic represents single day needs with full distribution system in place and operating.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Ike Commodities Model	
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Sources: HURREVAC LRL-DEBRIS	

US Army Corps of Engineers

Hurricane Ike Commodities Model

Landfall Expected In About **48** Hours

For Planning Purposes Only!

State	Truckloads per State	County	Truckloads per County
Texas		Anderson	1
		Austin	1
		Brazoria	13
		Chambers	2
		Fort Bend	22
		Galveston	12
		Grimes	1
		Hardin	1
		Harris	164
		Houston	1
		Jefferson	1
		Leon	1
		Liberty	4
		Madison	1
		Matagorda	2
		Montgomery	18
		Polk	1
		San Jacinto	2
		Trinity	1
		Walker	3
		Waller	1
		Wharton	1
Texas	254		

The amount of commodities forecasted is based on Mission Guide Book requirements and SME input and the above table indicates suggested needs based on phased deployment of a commodities distribution system.

Details about this model may be obtained at http://www.englink.usace.army.mil
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Hurricane Ike Commodities Model

Generated By: Siemsen/Deatrick, LRL
0800 EDT 09/11/2008

Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Ike Temporary Roofing Model

Landfall Expected In About **48** Hours

For Planning Purposes Only!

Post Landfall Temporary Roofing Model Results

Texas - 112,800

Model results per County on following page

This model is based on a Category 3 storm making landfall near Galveston, TX.

Forecast Track
Historic Track

Temporary Roofing

- < 2,000 units
- 2,000 - 3,999 units
- 4,000 - 5,999 units
- 6,000 - 9,999 units
- > 10,000 units

Information provided on this page displays a Category 3 storm making landfall near Galveston, TX. These projections are based on information from the NHC (0500 EDT 09/11/2008) forecast. Temporary roofing is based on 2% in CAT 1, 5% in CAT 2 and 11% in CAT 3.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Ike Roofing Model	
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Sources: HURREVAC LRL-DEBRIS	Page 6 of 13

US Army Corps of Engineers

Hurricane Ike Temporary Roofing Model

Landfall Expected In About **48** Hours

For Planning Purposes Only!

State	House Units per State	County	House Units per County
Texas		Anderson	< 100
		Austin	< 100
		Brazoria	9,700
		Chambers	300
		Fort Bend	8,400
		Galveston	5,800
		Grimes	< 100
		Hardin	< 100
		Harris	80,300
		Houston	< 100
		Jefferson	< 100
		Leon	< 100
		Liberty	600
		Madison	< 100
		Matagorda	300
		Montgomery	6,400
		Polk	200
		San Jacinto	200
		Trinity	< 100
		Walker	400
		Waller	200
		Wharton	< 100
Texas	112,800		

Temporary roofing is based on 2% in CAT 1, 5% in CAT 2 and 11% in CAT 3.

Details about this model may be obtained at http://www.englink.usace.army.mil
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Hurricane Ike Roofing Model

Generated By: Siemsen/Deatrick, LRL
0800 EDT 09/11/2008

Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Ike Temporary Housing Model

Landfall Expected In About **48** Hours

For Planning Purposes Only!

Post Landfall Temporary Housing Model Results

Texas - 41,400

Model results per County on following page

This model is based on a Category 3 storm making landfall near Galveston, TX.

Forecast Track
Historic Track

Temporary Housing

- < 2,000 units
- 2,000 - 3,999 units
- 4,000 - 5,999 units
- 6,000 - 9,999 units
- > 10,000 units

Information provided on this page displays a Category 3 storm making landfall near Galveston, TX. These projections are based on information from the NHC (0500 EDT 09/11/2008) forecast. Temporary housing is based on 1% in CAT 1, 2% in CAT 2 and 3% in CAT 3.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Ike Housing Model	
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Sources: HURREVAC LRL-DEBRIS	Page 8 of 13

US Army Corps of Engineers

Hurricane Ike Temporary Housing Model

Landfall Expected In About **48** Hours

For Planning Purposes Only!

State	House Units per State	County	House Units per County
Texas		Anderson	< 100
		Austin	< 100
		Brazoria	2,800
		Chambers	200
		Fort Bend	3,100
		Galveston	2,300
		Grimes	< 100
		Hardin	< 100
		Harris	29,600
		Houston	< 100
		Jefferson	< 100
		Leon	< 100
		Liberty	300
		Madison	< 100
		Matagorda	200
		Montgomery	2,700
		Polk	< 100
		San Jacinto	< 100
		Trinity	< 100
		Walker	200
		Waller	< 100
		Wharton	< 100
Texas	41,400		

Temporary housing is based on 1% in CAT 1, 2% in CAT 2 and 3% in CAT 3.

Details about this model may be obtained at http://www.englink.usace.army.mil
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Hurricane Ike Housing Model

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0800 EDT 09/11/2008

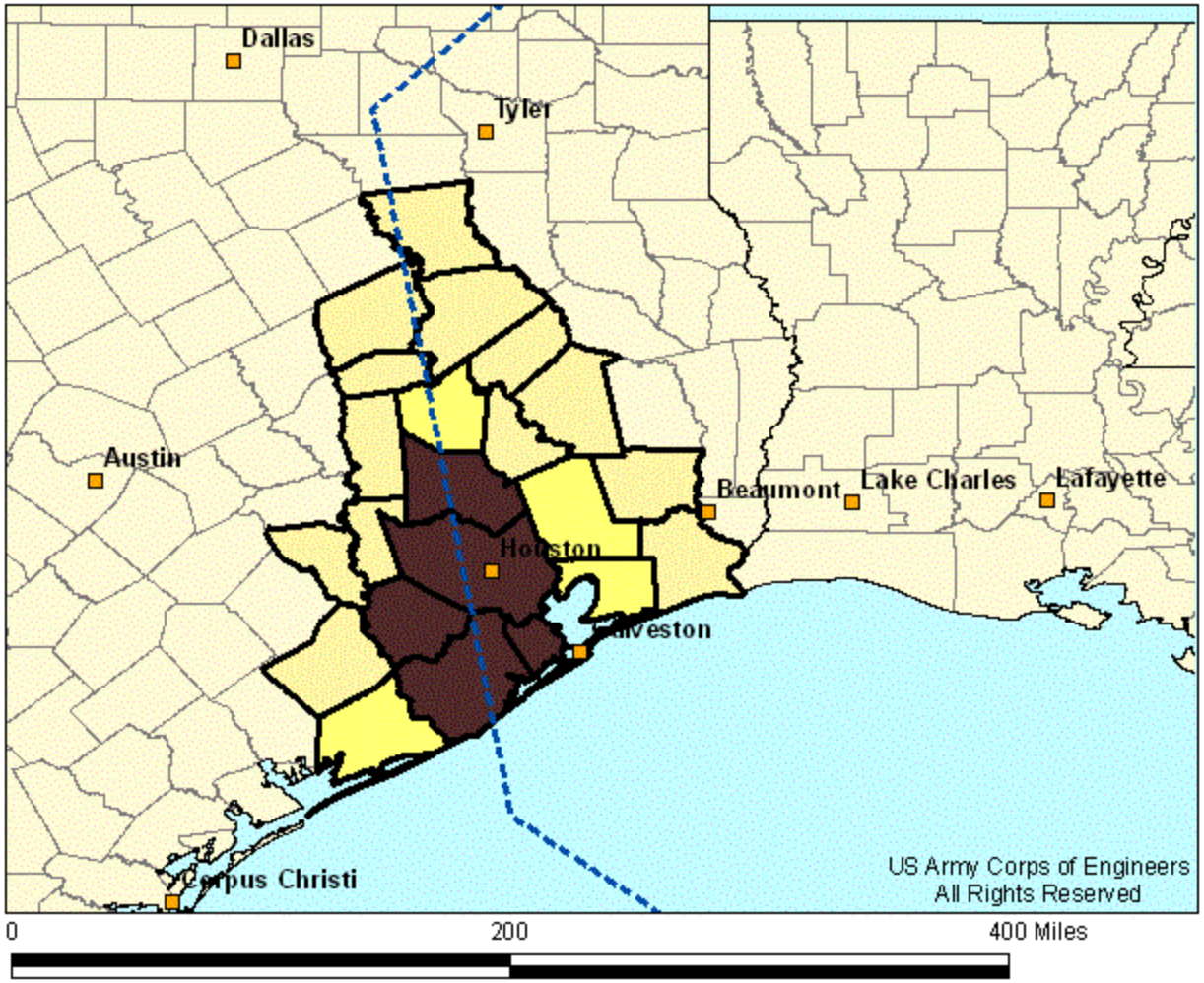
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Ike Population Model

Landfall Expected In About **48** Hours

For Planning Purposes Only!



Post Landfall Results – Resident Population Within Hurricane Force Winds

Texas - 5,738,000

Model results per County on following page

This model is based on a Category 3 storm making landfall near Galveston, TX.

Forecast Track
Historic Track

Population

- < 25,000 persons
- 25,000 - 99,999 persons
- 100,000 - 174,999 persons
- 175,000 - 249,999 persons
- > 250,000 persons

Information provided on this page displays a Category 3 storm making landfall near Galveston, TX. These projections are based on information from the NHC (0500 EDT 09/11/2008) forecast. The numbers of persons included in this model output are those that would be included within estimated hurricane force winds (Census 2000 values adjusted to July 2007 values).

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Ike Population Model	
Generated By: Siemsen/Deatrick, LRL 0800 EDT 09/11/2008	
Sources: HURREVAC LRL-DEBRIS	

US Army Corps of Engineers

Hurricane Ike Population Model

Landfall Expected In About **48** Hours

For Planning Purposes Only!

State	Population per State	County	Population per County
Texas		Anderson	< 1,000
		Austin	< 1,000
		Brazoria	295,000
		Chambers	28,000
		Fort Bend	509,000
		Galveston	285,000
		Grimes	11,000
		Hardin	2,000
		Harris	3,933,000
		Houston	5,000
		Jefferson	< 1,000
		Leon	6,000
		Liberty	75,000
		Madison	6,000
		Matagorda	27,000
		Montgomery	413,000
		Polk	20,000
		San Jacinto	25,000
		Trinity	6,000
		Walker	64,000
		Waller	24,000
		Wharton	4,000
Texas	5,738,000		

The number of persons estimated to be within the hurricane force winds comes from Census 2000 values adjusted to July 2007 values.

Details about this model may be obtained at http://www.englink.usace.army.mil
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Hurricane Ike Population Model

Generated By: Siemsen/Deatrick, LRL
0800 EDT 09/11/2008

Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Ike Households Model

Landfall Expected In About **48** Hours

For Planning Purposes Only!

Post Landfall Results – Resident Households Within Hurricane Force Winds

Texas - 2,013,000

Model results per County on following page

This model is based on a Category 3 storm making landfall near Galveston, TX.

Forecast Track
Historic Track

Households

- < 7,500 households
- 7,500 - 14,999 households
- 15,000 - 24,999 households
- 25,000 - 49,999 households
- > 50000 households

Information provided on this page displays a Category 3 storm making landfall near Galveston, TX. These projections are based on information from the NHC (0500 EDT 09/11/2008) forecast. The numbers of households included in this model output are those that would be included within estimated hurricane force winds (Census 2000 values adjusted to July 2007 values).

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Ike Households Model	
Generated By: Siemsen/Deatrick, LRL 0800 EDT 09/11/2008	
Sources: HURREVAC LRL-DEBRIS	

US Army Corps of Engineers

Hurricane Ike Households Model

Landfall Expected In About **48** Hours

For Planning Purposes Only!

State	Households per State	County	Households per County
Texas		Anderson	< 1,000
		Austin	< 1,000
		Brazoria	100,000
		Chambers	10,000
		Fort Bend	160,000
		Galveston	108,000
		Grimes	4,000
		Hardin	< 1,000
		Harris	1,394,000
		Houston	2,000
		Jefferson	< 1,000
		Leon	3,000
		Liberty	25,000
		Madison	2,000
		Matagorda	10,000
		Montgomery	146,000
		Polk	7,000
		San Jacinto	10,000
		Trinity	3,000
		Walker	19,000
		Waller	8,000
		Wharton	2,000
Texas	2,013,000		

The number of households estimated to be within the hurricane force winds comes from Census 2000 values adjusted to July 2007 values.

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